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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/827,881

04/04/2001

Chang June Song

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7590

05/21/2004

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EXAMINER

NGUYEN, DUC M

ART UNIT

PAPER NUMBER

2685

5

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/827,881

Applicant(s)

SONG, CHANG JUNE

Examiner

Duc M. Nguyen

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

**Information Disclosure Statement**

The information disclosure statement (IDS) submitted on 5/9/01 has been considered by the examiner.

**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-3, 5, 8-10, 13** are rejected under 35 U.S.C. 102(b) as being anticipated by **Rabe** (US Pat No. **5,963,640**).

Regarding claim **1**, **Rabe** discloses radiotelephone (wireless) having a wave guide for channeling sound energy from a speaker to the ear of the person, wherein the speaker and microphone are located in the main body (first end) of the phone while the tube coupled to the speaker and having an outlet is positioned proximate the opening of the flip (second end), this would include all the claimed limitations (see Figs. 1, 7 and col. 2, line 60 – col. 5, line 46).

Regarding claims **2-3, 5, 8-10, 13**, they are rejected for the same reason as set forth in claim 1 above. In addition, **Rabe** further discloses

- a cap as claimed (see airtight seal, col. 3, lines 45-51);

- the speaker is located near the first end (see Fig. 1, ref. 24);
- a horn as claimed (see sound port 32 in Fig. 1);
- acoustic coupling that conveys aural energy from the first section to the second section as claimed (see Fig. 7 and col. 5, lines 7-25);
- backwall and a pair of spaced channel walls as claimed (see Fig. 7).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **4, 6, 7, 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rabe**.

Regarding claims **4, 6, 11-12**, the claims are rejected for the same reason as set forth in claim 1 above. In addition, although **Rabe** is silent on the non-conductive material, it is noted that using a conductive material for the housing of the wireless phone other than the antenna would interference with signals radiated or received by the antenna. Therefore, it would have been obvious to one of ordinary skill in the art to modify **Rabe** for using non- conductive material for the flip or the wave guide tube as claimed, for preventing interferences with the antenna.

Regarding claim 7, the claim is rejected for the same reason as set forth in claim 1 above. In addition, it would have been obvious to one of ordinary skill in the art to modify **Rabe** for shaping the horn (sound port) as claimed, so that the sound can be directed with a wide angle for ensuring the reception of the sound by the ear.

### **Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rabe (US 5,832,079), Acoustic horn for use in cellular flip phone.

Chan et al (US 5,528,689), Telephone headset adaptor including a hearing sound tube, a speaking sound tube, a headset, a telephone ear cup and a telephone mouth cup.

Ingbir et al (US 6,377,824), Radiation-free cellular phone system.

Hanna et al (US 6,731,956), Retractable cord for a mobile phone or other wireless device.

6. **Any response to this action should be mailed to:**

Commissioner of Patent and Trademarks

Washington, D.C. 20231

or faxed to:

703-872-9314 (for formal communications intended for entry)

(for informal or draft communications, please label PROPOSED or DRAFT)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Art Unit: 2685

Drive, Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc M. Nguyen whose telephone number is 703-306-4531. The examiner can normally be reached on Monday-Thursday (9:30 AM – 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Duc M. Nguyen



May 4, 2004